

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously Presented) A method for modulating the immune response in a mammal to an antigen by implanting within the body of said mammal a device comprising a porous matrix comprised of a first polymeric material contained within a perforated but otherwise impermeable container comprised of a second polymeric material, said matrix containing a quantity of said antigen, wherein said device attracts cells of the immune system to encounter said antigen within said device and to modulate said immune response.

2. (Previously Presented) The method of claim 1 wherein the antigen is bioavailable within said porous matrix at the time of implantation of said device into said mammal.

3. (Previously Presented) The method of claim 1 wherein the antigen becomes bioavailable within said porous matrix after the device has been implanted into said mammal.

4. (Previously Presented) The method of claim 3 wherein said antigen becomes bioavailable about three days after implantation within said mammal.

5. (Previously Presented) The method of claim 1 wherein said antigen is introduced into said device about three days after implantation.

6. (Previously Presented) The method of claim 1 wherein said antigen is provided in a delayed release formulation.

7. (Canceled)

8. (Previously Presented) The method of claim 1 wherein said first polymeric material is selected from the group consisting of natural and synthetic sources.

9. (Previously Presented) The method of claim 8 wherein said first polymeric material is selected from the group consisting of hydroxylated polyvinyl acetate, polyurethane, ethylene/vinyl acetate copolymer, polylactic acid, polyglycolic acid, polylactide-glycolide copolymer, gelatin, collagen, cross linked collagen, and combinations thereof.

10. (Previously Presented) The method of claim 1 wherein said second polymeric material comprises a material selected from the group consisting of natural and synthetic sources.

11. (Previously Presented) The method of claim 1 wherein the porous matrix comprises hydroxylated polyvinyl acetate and the container comprises a segment of perforated tubing.

12. (Previously Presented) The method of claim 1 wherein said quantity of antigen and the timing of the bioavailability of said antigen within said device relative to the time of implantation of said device into said mammal results in inducing or enhancing the immune response to said antigen.

13. (Previously Presented) The method of claim 12 wherein said antigen is bioavailable within said device after implantation of said device into said mammal.

14. (Previously Presented) The method of claim 13 wherein said antigen is introduced into said device about 2-4 days after the implantation of said device into said mammal.

15. (Canceled)

16. (Canceled)

17. (Previously Presented) The method of claim 1 wherein said device is removed from the body of said mammal after a period of about 10 days.

18. (Previously Presented) The method of claim 1 wherein a second quantity of said antigen is reintroduced into said device.

19. (Previously Presented) The method of claim 18 wherein said second quantity of said antigen becomes available in said device by the delayed release of said quantity of said antigen present within the device at the time of implantation.

20-47. (Canceled)

48. (Previously Presented) A method of immunizing a mammal with an antigen for the preparation of a hybridoma for the production of a monoclonal antibody against said antigen, comprising the steps of immunizing the mammal using the method of claim 12 and harvesting the immune cells from said device.

49. (Canceled)

50. (Previously Presented) The method of claim 12 wherein said immune response to said antigen is selected from the group consisting of prophylactic vaccination, therapeutic vaccination, cellular immunity, humoral immunity, mucosal immunity, long-term immunity, and combinations thereof.

51-57. (Canceled)

58. (Original) The method of claim 10 wherein the second polymeric material is selected from the group consisting of polyethylene, cross-linked collagen, silicone, latex, resin, polystyrene, acrylic resin, polyvinylpyrrolidone, and combinations thereof.

59. (Original) The method of claim 1 wherein the first polymeric material is substantially the same as the second polymeric material.

60. (Currently Amended) ~~The method of claim 1~~A method for modulating the immune response in a mammal to an antigen by implanting within the body of said mammal a device comprising a porous matrix comprised of a first polymeric material contained within a perforated but otherwise impermeable container comprised of a second polymeric material wherein said container features perforations approximately 1/16 to 1/32 of an inch in diameter, said matrix containing a quantity of said antigen, wherein said device attracts cells of the immune system to encounter said antigen within said device and to modulate said immune response.

61. (Currently Amended) ~~The method of claim 1~~A method for modulating the immune response in a mammal to an antigen by implanting within the body of said mammal a device comprising a porous matrix comprised of a first polymeric material contained within a perforated but otherwise impermeable container comprised of a second polymeric material wherein said container features about 10 perforations per centimeter of tubing, said matrix containing a quantity of said antigen, wherein said device attracts cells of the immune system to encounter said antigen within said device and to modulate said immune response.